THE PLOTTER

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TRAINING SOCIETY
NEWS LETTER
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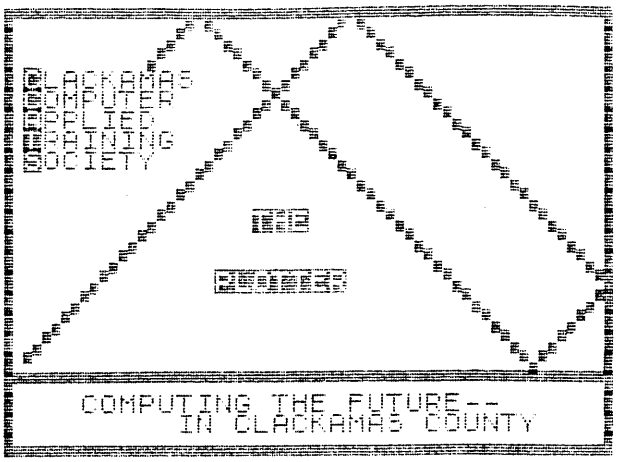
FEBRUARY 1994



EDITED BY: DICK WAGNER
CHAIRMAN: JACK ARMSTRONG
V/CHAIRMAN: BILL DUNLOP
SECRETARY: DICK WAGNER
TREASURER: ROD GOWEN
PR OFFICER: BOB EVANS
LIBRARIANS: BILL DUNLOP
ALICE DUNLOP

MEETING

The FEGRUARY meeting will be:

on: SUN., FEBRUARY 20 1994

MEETING 2:00 TO 5:00 P.M.
at: Rod Gowen's home
14784 S. Quail Circle
Oregon City

WHAT YOU WILL FIND IN THIS ISSUE:

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FROM THE EDITOR'S DESK

Yesterday I wondered about what I would write in this column which seems to have taken over from the Secretary's Minutes of times past. Today it has all fallen in place with varied subjects in the computer world.

Today our local newspaper, The Oregonian, carries an article on INTEL'S entry into the electronic superhighway with a system that not only communicates via computers almost anywhere suitable telephone cables are available but has picture display capability along with the data/text screen. The article mentions the vast capability of such a system for some 100 million+ computer owners but the expected 2 1/2 times the number in use by year 1996!

In a past issue of UPDATE magazine there was an add by a Dr. Williamson requesting how to locate some equipment for his 2068 computer. He lives in Halifax, Nova Scotia. I wrote to him suggesting a possible source from a Henry Hill I had become acquainted with on a visit to Nova Scotia. Well, a letter arrived today,

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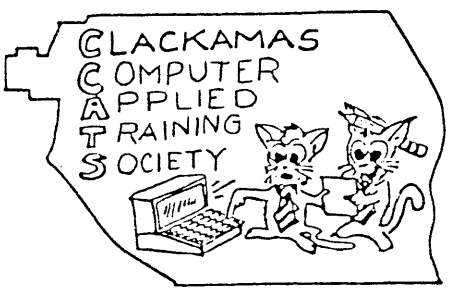

giving a rundown on what he has done. It seems that Henry no longer resides in Halifax. Dr williamson decided to invest in a 486 IBM clone (favorable cost). Anyway, it was a good try. He mentioned that he was getting along in years (aren't we all), being in his 70s so decided he would be better off by working with a complete unit.

Have any of our readers used computer word processors in writing poetry? It seems like a good way to go, what with trying to come up with the right words to ryme. So easy to store a line or sentence while working on another try. This is leading into a poem in this issue written by my 10 year old grandson who is becoming well acquainted with using a Macintosh computer at home and Apple computers at school. The border he added does kind of hint at Apple.

This article is being written on Microsoft WINDOWS, the program Write being a part of WINDOWS. It is not an elaborate program but it would probably take care of most ordinary letter writing. It does have a nice selection of fonts so in this respect it does a nice job. However, the ability to insert printer commands is missing. Thus, the heading is 20 points high, a little less than the normal my Epson printer uses for double high, but the Epson is normal character width, which I prefer. More on this program, the WINDOWS program for a 286 computer, and a utility to read Mackintosh disks on my 286 as well as generate programs that can be read with the Mackintosh. Why? you ask. Well, with 2 Mackintosh computers in the family along with several 386-486 units it seems like a good way to communicate a little better, having a bit more in common.

After working with WRITE for a while I became aware that there was no way to keep track of the line number within a page. There are provisions for page breaks, for example the first part of this article has about 35 lines to fit in the space. I had to physically count the number of lines to do this. I think counting is left out because True Type fonts are provided and these can vary greatly in size. I do notice that the heading acts as one line per row so actually the count would be three including the spacing.

I had to call on friend Rod Gowen to clean up the hard drive and add extended memory access through HIMEM, a feature of WINDOWS. The drive really needed working on to clear out things not in use. As this is a relatively small hard drive (44m) it looks like the best operating procedure will be to use 1.44m disks as much as possible.

I haven't looked over the material on hand, such things that I haven't had space for in the past. Sometimes a long article or program will leave material unused for that issue. With 10 pages last month we just might end up with 6 pages this time. Maybe I should check back and see what I have promised to print but haven't.

BACK & FORTH PROFESSIONAL 2.Ø

A Program Review

by: Rod Gowen

BACK & FORTH PROFESSIONAL VERSION 2.ØØ is a "task swapping" package. It is distributed as shareware from Progressive Solutions. I have had it registered for about 3 years and am only now finding out just what it can do for me! In the following paragraphs, I will attempt to tell you what it is capable of doing for you as well.

First, this program will run on any MS-DOS machine from an XT to the Pentiam. It requires 64ØK of RAM and a hard drive for swapping. You will find, rather quickly, that an XT, even one running at 1Ø-12Mhz is far too slow to efficiently make use of this package without at least 2 Mbytes of expanded memory. For this reason, unless you already have the RAM available, I would recommend that it would be more useful on a 286 or higher, running at a clock speed of at least 16Mhz and with at least 2 Mbytes of expanded memory to use for swapping.

AN OVERVIEW---

Back & Forth does just what its name says--allows one to move back and forth between applications. I know, I know! You're saying "Why not just use Windows?" Well, I did try Windows 3.1 and found out rather quickly that, unless you are willing to give up all of your existing DOS applications (at least DATABASES), you would have to accept the fact that searches within the data files will take about 3 times as long as they do from DOS alone. As most of my data is in DBF files that are NOT compatible with any Windows DBF program (I am a long-time user and booster of ARCHIVE DB), I was unwilling to re-enter all of my data, especially since I do not particularly like the GUI environments anyway. I prefer the keyboard to a mouse. I find it much easier to just press one, two or three keys to get where I want to go. If you are in this same category of computer users, then Back & Forth Pro may be what you have been looking for.

I am running a 386-40 with 20 Mbytes of RAM and a 200 Mbyte hard drive. I have given B&F Pro 15 Megs to use as swap space. This has allowed me to have up to 20 applications up and going at the same time. I DID NOT SAY "RUNNING" AT THE SAME TIME! I said "going". This is to say, I loaded each of them and swapped them out to the swap drive, one after the other, until all were set up. After this is done, I can then almost instantly select the one I want to work in with just the pressing of 2 or 3 keys simultaneously. The same way you would press CTRL-ALT-DEL to reboot your computer. The program allows you to set ALL hotkeys for your applications as well as for the built-in "Backpacks". Backpacks are the calculators, text editor (your own or the internal one), a screen grabber to capture screens as graphic images, a cut/paste clipboard, a print buffer and a rolodex type database with which you can dial out and even print mailing labels. VERY powerful stuff! I found that the DBF files are searched in almost the same time as from DOS alone. If there is a slow-down, it is so slight that I cannot measure it. It takes approximately 1 to 1.5 seconds for one application to swap with another. AND, when I return to each application, my cursor is exactly where I left it! I can live with this!

Virtually everything on any screen can be colored to suit the user. The cursor can also be customized. I found that the "half-block" size works best for me. One of my long time complaints about Archive (I haven't many) is the fact that it has never had a flashing cursor and that, while in Edit mode, working on procedures, it is hard to tell what line you are on by the highlight only. With the new cursor supplied by B&F Pro, the "half-block" is there, at the end of the line that is being highlighted, flashing away! B&F Pro will also allow you to turn on a "key-click" if you so desire. It is not an obnoxiously loud click, just enough so you can tell that you have struck a key. I find this useful as well.

There is also a built-in screen blanker and an on screen clock that can be set to show up only while at the B&F Pro main menu or on all screens. The program offers the ability to lock the keyboard with a password if you have to leave your computer for a while. For those of you who may like to use a graphics user interface (GUI), there is the ICON VIEW menu. If you choose to use this option, the main menu becomes a pair of windows with icons representing each of your applications. As B&F PRO is fully compatible with a mouse, you can then simply click on the icon representing the application you want to go to.

Other features include: A BOOT WATCH--can be set to allow the use of the warm boot (CTRL-ALT-DEL) or not. If you do use it while applications are open, data can be lost. A DISK WATCH--puts a visible symbol on the screen when a drive is being written to or read. You can customize the menu title and the fill character (the character that

fills the screen around the menu) and turn on/off snow checking and the swapping indicator. You can also set the number of lines to be displayed on the screen (if you are using VGA).

One of the best things that can be set up by the user is the AUTO-LOAD which allows you to have B&F PRO load all of the applications that you want to use daily at the time it (B&F PRO) is brought up. You can also select the application that you want to end up or start out in. This allows me to have it load the 10-12 applications that I use daily into the swap drive as soon as I bring up B&F PRO and puts me right into my business database, ready to go to work.

All in all, this is a VERY powerful package. With a registration price of $60-70, it is the best buy i have made over the years. If you are telling yourself that maybe Windows would be a better choice, maybe so, but not for me. I do not work in a place where Windows is the norm. I do play with Windows from time to time to stay up-to-date for my customers benefit, but will not be using it regularly. If you are also saying that, if you run Windows, your applications are always running in the background, THINk AGAIN! Windows is a PRE-EMTIVE MULTI-TASKING ENVIRONMENT, as opposed to OS/2, which is a CO-OPERATIVE MULTI-TASKING ENVIRONMENT. This means that both Windows and B&F PRO swap the inactive applications into the background but all activity in that application ceases at the moment that the swap-out occurs!

If you are interested in trying this package out, you can get a copy from RMG Enterprises for $7.50 postpaid on 3.5" or 5.25" diskette. Be sure to specify when ordering this shareware. If you have questions, feel free to call or write.

TWELVE COINS

Dick F. Wagner

Working with programming puzzles can be difficult as one must solve the puzzle as well as program the steps to solve the puzzle.

Well, why not try your luck with this puzzle and send in your program so we can print it for all to enjoy. Another benefit is that you get your name in print along with aiding this Editor in filling THE PLOTTER.

YOU HAVE 12 IDENTICAL COINS (MAYBE), AT LEAST ALL ARE OF THE SAME DENOMINATION. ONE IS A CONTERFEIT. IF THERE IS A CONTERFIET COIN IT IS EITHER SLIGHTLY HEAVIER OR LIGHTER THAN THE OTHERS. IF SO, CAN YOU LOCATE IT? YOU HAVE AT YOUR DISPOSAL A BALANCE SCALE (YOU REMEMBER, A BALANCE HAS TWO PANS SO WEIGHTS CAN BE PUT IN ONE PAN TO BALANCE WHAT IS IN THE OTHER PAN). YOU ALSO NEED TO MAKE THE LEAST NUMBER OF MOVES.

THE COINS ARE REPRESENTED BY THE LETTERS A---L. SELECT THE COINS YOU WISH TO COMPARE.

Frankly, the Editor has not solved this puzzle but then he is no better at solving puzzles than he is in programming.

CIRCLES

Dick F. Wagner

Say circle A is stationary and has a circumference 3 inches. Circle B is free to roll around in inside of the perimiter of circle A and has a circumference of 1 inch. If circle B, starting at point C, rolls completely around the inside of the perimiter of circle A, returning to point C, how many revolutions will it have made?

The Editor would appreciate answers to these 2 puzzles in program form so they can be printed in a future issue.

SINCLAIR BASIC TO GW-BASIC

Dick Wagner

This article is about the trigonometric functions, mainly arcsin, arccos, & arctangent, also known as inverse sine, inverse cosine, and inverse tangent, also known as SIN^{-1}, COS^{-1}, and TAN^{-1}. Sinclair BASIC uses the abreviations ASN, ACS & ATN. Confused?

I was preasented with the problem of how to take a program from Sinclair BASIC that used ASN and ACS and enter it into GW-BASIC that does not use ASN and ACS but does have the ATN funtion. It seems that it is not unusual but books seem to be moot on the reason for this.

From a computer book--the ATN and TAN funcions return the trigonometric functions arctan and tan of the specified arguments. ATN returns the arctangent (inverse tangent) of the argument numeric expression; that is, the angle having tangent numeric expression. TAN returns the tangent of the angle numeric expression. The computer uses numeric expression in radians. For those readers who do not remember the degree/radian relationship, convert radians to degrees with the multiplyer 57.2958 and degrees to radians with the multiplyer 0.017453.

A 1984 book on IBM BASIC in my possesion devotes an unusual amount of space on the trionometric functions. Lucky, it includes a table of derived mathametical functions that includes the very solutions I was interested in ie: converting the ASN and ACS funtions to ATN.

MATH FUNCION	BASIC FORMULA
INVERSE SINE	ARCSIN(X)=ATN(X/SQR (1-X^2)
INVERSE COSINE	ARCCOS(X)=1.570796-ATN(X/SQR(1-X^2)

Note that by using ATN (ARCTANGENT) we can calculate ARCSIN(X) and ARCCOS(X). As mentioned previously, the ATN function returns the angle (in radians) whose tangent is given by its operand.

Another way to explain this relationship is this:

A, angle in radians---->TAN(A)---->opposite side/adjacent side

The reverse of this uses ATN:
opposite side/adjacent side---->ATN----> A, angle in radians.

A good way to use such formulas is by using DEF FN (X). In GW-BASIC this is typed DEF FN(X). An example in GW-BASIC is

```
50 DEF FNARCSIN(X) = ATN(X/SQR(1-X*X))
```

In a future article we will will give 20 derived functions that just might be useful to a reader.

VALENTINE GREETINGS

Our little Valentine greeting was made with PARSONS TECHNOLOGY program Announcements for Windows. It is something like New Print Shop in what it does. It appears that cards (folded), banners, and posters are it's main use design-wise.

This program has some very good graphics to use, as well as a good assortment of fonts. Both are automatically proportioned to fit the windows they will appear in. The screen image is a fair display of what will be printed, except for a few features like text being centered. About 225 images of various catagories, such as Holidays, People, Animals, etc provide a wide range of pictures. It is weak on border, having only a few choices.

This is a fun program. I set up 3 windows to produce the display, having selected the image to work with. While the windows are adjustable to the right and bottom, they must start at a left border of the original work space, in this case less than 1/2 page width as a card is an 8 1/2 x 11 sheet to be folded into quarters.

HAPPY VALENTINE'S DAY
FROM CCAIS

I SHOT AN ARROW IN THE AIR
WHERE IT LANDED I KNOW (NOT) WHERE

RMG UPDATE NEWS FOR FEBRUARY 1994
VOLUME 6 NUMBER 2

** RMG NEWS **

Well, here it is February and the year is starting out real slow! As you can see by our mailing, absolutely NOTHING has changed on our consignment sheets since December 10, 1993. That is why you are only getting 2 pages this time. To repeat our policy: we only send out those pages that have had changes made to them since the last mailing. If someone wants to obtain a new, complete set of consignment pages, you must send us a large S.A.S.E.. A 9x12 manilla with at least 75 cents postage will do it. For that yuo will get all 13 consignment pages, the current newsletter and any price lists that you may want. Take a look at your previous flyers and see if there is not something there that you cannot live without. Let's get these items into use again!

Due to the fact that UPS has again raised its rates as of 2/7/94, we are forced to increase our minimum shipping charge to $6.00. This is ther first time we have raised our minimum charge in almost 2 years. Due to the lack of sales and declining business, we have also had to stop our daily pickup by UPS. The new costs are such that a small business like ourselves cannot afford to pay the $7.00 per week to have the truck come by if we do not have items to go out at least 3-4 times a week. It will now be our policy to have shipments going out by mail when possible and by UPS where necessary because of weight and size. Our UPS shipments will only be going out every 2 weeks. If you order and do not see something arrive as quickly as you used to, don't dispair, it will arrive soon!

HELP!!! We need your help for one of our customers. He has a QL and is using PC Conqueror (MS-DOS emulator) and wants to print files to his printer. The question: How do you do it? What is the proper syntax to tell Conqueror and DOS that you want to print through SER1 to a parallel printer. We know that you have to redirect LPT1 to COM1, but he needs the syntax. Anyone want to send us a note with the proper lines? It would be much appreciated.

Are you a regular reader of THE PLOTTER? If not, why not? The Plotter is the monthly newsletter published by CCATS user group. It still supports the complete line of TS computers as well as MS-DOS computers. After more than 11 years, it is still put out in its 8 page format and usually on time. Back issues are available. A one year subscription is just $12.00. If you would like to subscribe, send your check or money order to RMG ENTERPRISES today.

KEEP WATCHIN' FOR MORE NEWS! Rod Gowen, Owner, RMG Enterprises
14784 South Quail Grove Circle, Oregon City, OR 97045
503/655-7484 8AM-6PM PT * FAX/VOICEMAIL 503/655-4116 24 HRS

Apples

By Richard Wagner

When you eat an apple it goes
CRUNCH, CRUNCH, CRUNCH
You can eat it for breakfast dinner or lunch

But wait that is not the end of my story,
now comes the real glory.

Did you know when you take a bite of an apple
it gets squished into a drink that is call Snapple.

I don't think Snapple is very good
But people drink it all over the earth
In my opinion there is nothing worse

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